REMARKS

The above-identified Office Action dated September 22, 2004, contained a final rejection of claims 1-22. Minor non-substantive amendments have been made to claims 1, 2, 4, 12 and 15. Therefore, the Applicants submit that a new search will **not** be required by the Examiner. As such, the foregoing amendments to the claims and the remarks below are intended to place the case in condition for allowance, or alternately in better form for consideration on appeal under 37 CFR 1.116. Therefore, it is respectfully requested that the amendments to claim1 be entered despite the finality of the present rejection.

The Office Action rejected claims 1-8, 10-12-19 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Barbour et al. (EP 1029674A2) in view of Nozawa (U.S. Patent No. 6,499,821). The Office Action also rejected claims 9 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Barbour et al. (EP 1029674A2) in view of Nozawa (U.S. Patent No. 6,499,821), as applied to claims 1 and 12, and further in view of Saito (U.S. Patent No. 6,068,363). Next, the Office Action rejected claims 11 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Barbour et al. (EP 1029674A2) in view of Nozawa (U.S. Patent No. 6,499,821), as applied to claims 1 and 12, and further in view of Wade et al. (U.S. Patent No. 5,682,185).

The Applicants respectfully traverse these rejections because the combined cited references do **not** disclose all of the Applicant's features of each of the claims. Namely, as admitted by the Examiner (see page 3 of the Office Action), Barbour et al. do not disclose the Applicants' controller that reads the ejection history for calculating an adjusted pulse width *and to create a dynamic estimate of a current temperature distribution across the printhead assembly* [*emphasis added*]. With regard to Nozawa, although the Examiner stated this reference discloses "a use history of the printing head", a controller that is "configured to estimate a current temperature from a driven condition of the ejecting portion that dynamically changes", and "temperature sensing means that detects temperature across the printhead", the Examiner failed to show a disclosure in Nozawa or any of the other references the Applicants' controller that reads the ejection history for calculating an adjusted pulse width and to create a dynamic estimate of a current temperature distribution across the printhead assembly.

This is because Nozawa does **not** disclose this claimed feature. Instead, Nozawa

at col. 9, line 65 to col. 10, line 2, explicitly state that "[W]hen the head unit is constructed to be capable of detecting temperature of each nozzle or each group of a predetermined number of nozzles, it is possible to store and correct a temperature history using the nozzle or the nozzle group as a unit," which is very different from the Applicants' claimed invention. For instance, Nozawa is merely using detectable temperatures for storing and correcting temperature histories, which is **not** the same as the Applicants' controller that reads the ejection history for calculating an adjusted pulse width and to create a dynamic estimate of a current temperature distribution across the printhead assembly.

Therefore, Barbour et al. in combination with Nozawa cannot render the claims obvious because the combination is missing using an ejection history of the ink ejection elements to determine an optimal operating temperature or a nominal operating pulse width as a dynamic estimate of a current temperature distribution across the printhead assembly.

Further, even though the combination of the cited references **does not** produce all of the elements of the claimed invention, these references **should not** even be considered together since there is no motivation to combine the cited references. It is well-settled law that there **must be** a basis in the references for combining or modifying the references. Namely, the Examiner **cannot** arbitrarily "pick and choose" words or phrases from references and use hindsight to recreate the Applicants' invention. In particular, the combination of elements in a manner that reconstructs the Applicant's invention only with the benefit of **hindsight** is insufficient to present a prima facie case of obviousness. Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 796 F.2d 443, 230 USPQ 416 (Fed. Cir. 1986). There must be some reason, suggestion, or motivation found in the references whereby a person of ordinary skill in the field of the invention would make the combination. **That knowledge cannot come from the applicant's invention itself.** In re Oetiker, 977 F.2d 1443, 24 USPQ 2d 1443, 1446 (Fed. Cir. 1992) [emphasis added].

The Examiner is reminded that even if the reference in question seems relatively similar "...**the opportunity to judge by hindsight is particularly tempting**. Consequently, the tests of whether to combine references need to be applied rigorously," especially when the Examiner uses a reference that does not explicitly disclose the exact elements of the invention, which is the case here. McGinley v. Franklin Sports Inc., 60 USPQ 2d 1001, 1008 (Fed. Cir. 2001). [emphasis added]. Since the Examiner's rejection

is based on hindsight, the rejection is improper and must be withdrawn. Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.

With regard to the rejection of the dependent claims, since they depend from the respective independent claims argued above and contain additional limitations, they are therefore also patentable at least on the same basis (MPEP § 2143.03).

As the foregoing amendments to the claims do not raise new issues, it is the Applicant's position that they are entitled to have the changes entered to place this case in condition for allowance, or alternately, in better condition for consideration on appeal under 37 CFR 1.116. It is, therefore, respectfully requested that the changes to the claims be entered despite the finality of the present rejection.

Thus, it is respectfully requested that the claims be allowed based on the amendments and arguments. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. Additionally, in an effort to further the prosecution of the subject application, the Applicants kindly **request** the Examiner to telephone the Applicants' attorney at **(818) 885-1575**. Please note that all mail correspondence should continue to be directed to:

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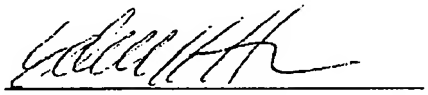
Respectfully submitted,
Dated: November 19, 2004



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